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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,154	08/03/2000	Dave Leahy	17376-5-1US	1133

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EXAMINER

NGUYEN, CAO H

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/632,154

Applicant(s)
Leahy et al.

Examiner
Cao (Kevin) Nguyen

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2173



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 25, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 8 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiio et al. (US Patent No. 5,491,743).

Regarding claims 4 and 9, Shiio discloses method for enabling a first user to interact with other users in a virtual space, wherein the first user and the other users each have an avatar and a client process associated therewith, and wherein each client process is in communication with a server process, comprising: (a) receiving data relating to motion of at least some of the other users' avatars from the server process (animated characteristics representing operators in virtual conference; see col. 5, lines 16-62); and (b) determining from the data a set of the other users' avatars that are to be displayed to the first user (only the selected operator may be displayed as allowable person to attend the conference; see col. 7, lines 1-35 and abstract).

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Regarding claims 5 and 10, Shiiro discloses step (a) comprises receiving, by the client process associated with the first user, data relating to motion of at least some of the other users' avatars from the server process and step (b) comprises determining, by the client process associated with the first user, from the data a set of the other users' avatars that are to be displayed to the first user (see col. 7, lines 37-67 and col. 8, lines 5-67).

Regarding claims 6 and 11, Shiiro discloses further comprising the steps of © monitoring motion of the first user's avatar; and (d) displaying the set of the other users' avatars from the perspective of the first user's avatar as monitored in step (c), wherein steps © and (d) are performed by the client process associated with the first user (see figures 4-5).

As claims 7-14 are analyzed as previously discussed with respect to claims 4-6 above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiio (US Patent No. 5,491,743) in view of Nitta (US Patent No. 5,347,506).

Regarding claim 1, Shiio discloses An apparatus for interaction between a plurality of users in a three-dimensional, computer-generated graphical space, comprising: a plurality of client processes, wherein each client process is executed on a digital computer distinct from the digital computers executing others of the plurality of client processes; a central server process, executed by a server computer; a network coupling the server computer to the digital computers which execute the plurality of client processes, thereby coupling the plurality of client processes with the central server process (see col. 5, lines 42-62); a plurality of user objects, executed as subprocesses of the central server process, wherein each of the plurality of user objects is associated with a user in the plurality of users (see col. 7, lines 1-62); an environment database, accessible by each client process; means for communicating a position of a particular user in the three-dimensional, computer-generated graphical space from the particular user's client process to the other client processes via the central server process, the means for communicating programmed according to a protocol (see col. 10, lines 23-65). However, Shiio fails to explicitly teach means on a digital computer executing the particular user's client process, for receiving

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positions of the users of the other client processes according to the protocol via the central server process and for determining from the positions of the users of the other client processes which of the users to render.

Nitta teaches for receiving positions of the users of the other client processes according to the protocol via the central server process and for determining from the positions of the users of the other client processes which of the users to render (see col. 3, lines 25-61). It would have been obvious to one of an ordinary skill in the art at the time the invention was made to provide for determining from the positions of the users of the other client processes which of the users to render as taught by Nitta to virtual conference system of Shiio in order to provide in order to provide a maximum count of avatars characters representing attendants at the virtual conference; and means, on the digital computer executing the particular user's client process, for rendering a three-dimensional view from a viewpoint of the location of the particular user, the rendered view including at least one object from the environment database and, when other users are at locations viewable from the rendered viewpoint, including those other viewable users as determined by the digital computer executing the particular user's client process (see col. 5, lines 10-68).

Regarding claim 2-3, Shiio discloses wherein the environment database comprises a single central environment database; and wherein the environment database comprises one copy of the environment data at each of the plurality of client digital computers (see figures 3-14).

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Claims 15 and 18 are differed from claims 1 in that “transmitting data indicating, the movement of the first and second avatars by the first and second client processes, respectively, to the server process; (c)transmitting the data indicating the movement of the first and second avatars, by the server process, to the second and first client processes, respectively; and (d) determining, by the second and first client processes, from the data indicating the movement of the first and second avatars, respectively, whether to display the first and second avatars.” which read on Shiiro see col. 9, lines 1-60).

Regarding claim 16 and 17, Shiiro discloses (e) displaying the first and second avatars when it is determined in step (d) that the first and second avatars are to be displayed; and wherein step (c) comprises automatically sending the data indicating a position of the first and second avatars, by the server process, to the second and first client processes, respectively (see col. 6, lines 49-67 and col. 7, lines 1-21).

Regarding claim 19 and 20, Shiiro discloses wherein the step © comprises the step of automatically transmitting by the server process to each client process the data indicating the movement of at least some of the avatars that are not associated with the client process; and wherein step (d) comprises (d)(1) determining an actual number of avatars that are not associated with the client process based on the data transmitted by the server process; (d)(2) determining a maximum number of avatars that can be displayed; and (d)(3) comparing the actual number to the maximum number to determine which of the avatars are to be displayed (see col. 7, lines 15-62.)

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Claims 21 and 23 differ from claims 1, 15 and 18 in that “synchronously disseminating to each of the client processes a packet of information updating a list of avatars display army the client process so that the client process can determine from the packet a set of avatars that are to be displayed” which read on Shio col. 10, lines 14-65 and figures 5-11).

Response to Arguments

5. Applicant's arguments filed on 02/25/03 have been fully considered but they are not persuasive.

Accordingly, the claimed invention as represented in the claims do not represent a patentable distinction over the art of record as discussed as above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response

8. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 305-9724 for informal or draft communications.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. Sixth Floor (Receptionist).


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Inquires

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cao (Kevin) Nguyen whose telephone number is (703) 305-3972. The examiner can normally be reached on Monday-Friday from 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca, can be reached on (703) 308-3116. The fax number for this group is (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.


CAO (KEVIN) NGUYEN
PRIMARY EXAMINER

May 16, 2003

